

Sight Distance Values⁵

DESIGN SPEED MPH	SIGHT DISTANCE - FEET							
	STOPPING SIGHT DISTANCE ¹	DECISION SIGHT DISTANCE ¹					PASSING SIGHT DISTANCE ^{1, 3, 4}	
		AVOIDANCE MANEUVER ²						
		A	B	C	D	E		
25	155	---	---	---	---	---	900	
30	200	220	490	450	535	620	1090	
35	250	275	590	525	625	720	1280	
40	305	330	690	600	715	825	1470	
45	360	395	800	675	800	930	1625	
50	425	465	910	750	890	1030	1835	
55	495	535	1030	865	980	1135	1985	
60	570	610	1150	990	1125	1280	2135	
65	645	695	1275	1050	1220	1365	2285	
70	730	780	1410	1105	1275	1445	2480	

Notes

1 From Chapter 3, GDHS 2001 and GDHS 2004 (values are identical in both editions).

2 Avoidance maneuver A: Stop on rural road - $t = 3.0$ s

Avoidance maneuver B: Stop on.
0 urban road - $t = 9.1$ s

Avoidance maneuver C: Speed/path/direction change on rural road - t varies between 10.2 and 11.2 s

Avoidance maneuver D: Speed/path/direction change on suburban road - t varies between 12.1 and 12.9 s

Avoidance maneuver E: Speed/path/direction change on urban road - t varies between 14.0 and 14.5 s

3 See chapter 3 of the Wisconsin Traffic Guidelines Manual (TGM) for No passing zone standards.

4 See [Attachment 5.8](#) for vertical curve design for Passing Sight Distance.

5 See [Attachment 5.2](#) for Sight Distance Categories and Application

Sight Distance Categories – Sight Distance Requirements ¹

Category	Sight Distance Requirement	
	Desirable	Minimum
1	Stopping Sight Distance (SSD) to a 6-inch object	SSD to a 24-inch object
2	[<i>BOTH</i>] Decision Sight Distance Avoidance Maneuver C (DSD-C) to a 24-inch object <AND> SSD to a 6-inch object. [Note: SSD to a 6-inch object is the only Desirable Sight Distance Requirement for points within a Category 2 roadway segment that are closer than SSD from the End Sight Distance Boundary (SDB) of that segment (see table starting on the next page of this attachment for SDB definitions).]	SSD to a 24-inch object
3	[<i>BOTH</i>] Decision Sight Distance Avoidance Maneuver C (DSD-C) to a 24-inch object <AND> SSD to a 6-inch object [Note: SSD to a 6-inch object is the only Desirable Sight Distance Requirement for points within a Category 3 roadway segment that are closer than SSD from the End Sight Distance Boundary (SDB) of that segment (see table starting on the next page of this attachment for SDB definitions).]	SSD to a 6-inch object

Notes

- 1 The available sight distance along a roadway must meet or exceed the required sight distance at every point along the roadway. The **Sight Distance Category** for a segment of roadway determines the required sight distance.
 See [Attachment 5.1](#) for Sight Distance Values
 See Table “Sight Distance Categories - Application & Sight Distance Boundaries” in this Attachment;
 See [Attachment 5.4](#), [Attachment 5.5](#), [Attachment 5.6](#) and [Attachment 5.7](#) for vertical curve design for Sight Distance Requirements; and
 See [Attachment 5.9](#) for horizontal curve design for Sight Distance Requirements.

Sight Distance Categories - Application & Sight Distance Boundaries

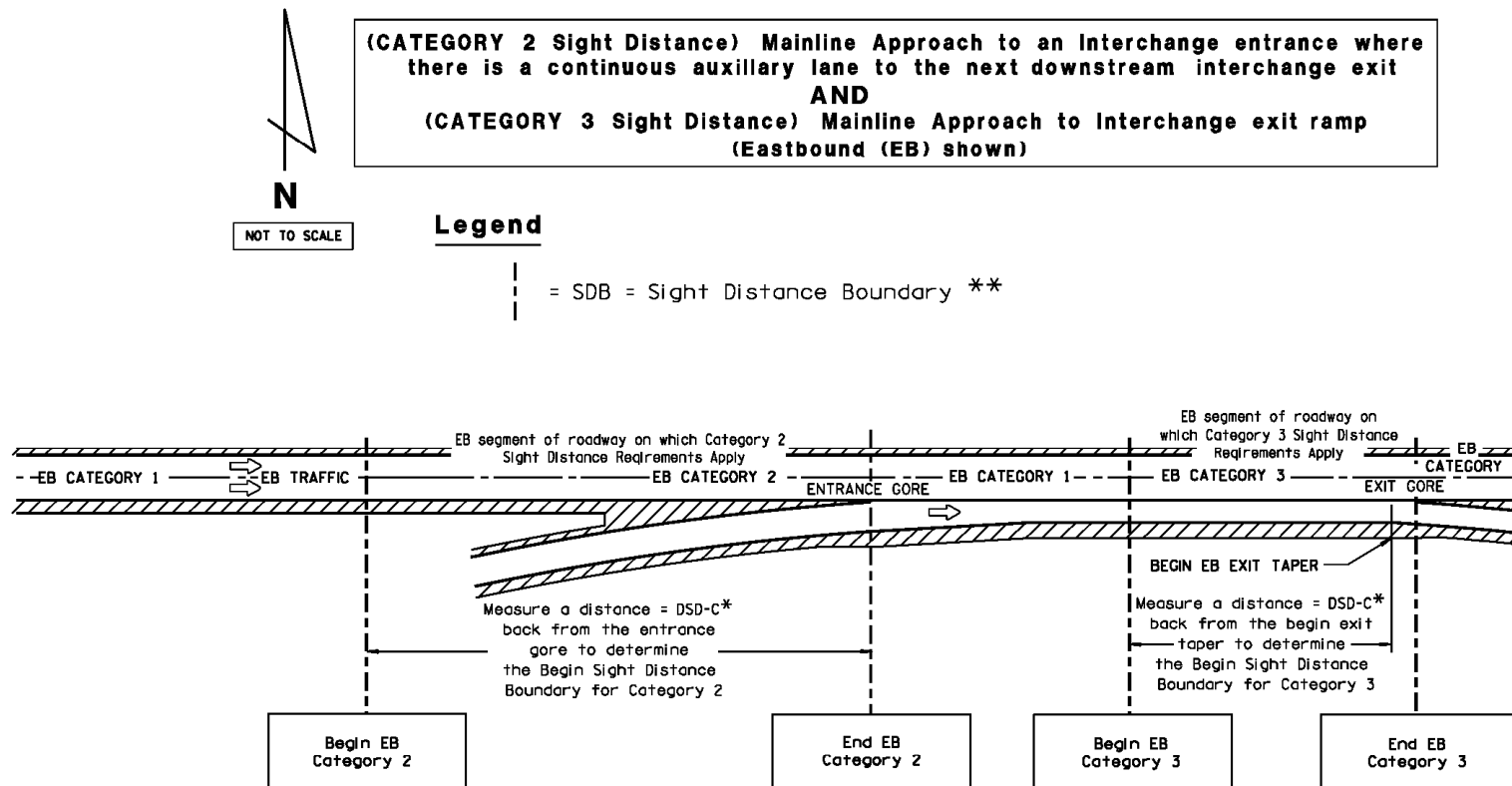
Category	Locations to Apply	Sight Distance Boundaries (SDB)	
		Begin	End
1	Default - All locations not in Category 2 or Category 3	End limit of Category 2 or Category 3	Begin limit of Category 2 or Category 3
2	Mainline approach to an Interchange entrance ramp where there is a continuous auxiliary lane to the next downstream interchange exit [See Example 1]	At a distance = DSD-C ¹ from the entrance ramp gore of the upstream interchange ²	At the entrance ramp gore of the upstream interchange ²
	Crossroad approach to an Interchange ramp terminal where the posted speed is 40 mph or less	At a distance = DSD-C ¹ from the CL of the ramp terminal intersection	At the CL of the ramp terminal intersection
	Lane drop on a non-freeway or non-expressway	At a distance = DSD-C ¹ from the start of the lane drop	At the end of the lane drop
	Railroad / highway at-grade crossings [See Example 2]	At a distance = DSD-C ¹ from the stop bar upstream from the RR tracks	At the stop bar upstream from the RR tracks
	High speed multilane highway approach to an intersection with a right turn but no left turn in the direction of travel [See Example 3]	At a distance = DSD-C ¹ from the back of the design queue ³	At the CL of the intersection
	Approach to an intersection where a thru lane becomes a "turn only" lane		
	Two-lane highway or non-high speed multi-lane road approach to an Intersection with an unusual configuration, including multiple right-turn lanes and/or multiple left-turn lanes		
	Side road approach to an at-grade intersection with a bypass roadway or expressway		
	High-speed 2-lane rural highway approach to an isolated stop sign, traffic signal, or roundabout where such control is unexpected because it is not typical		

3	Mainline thru lane that becomes an "exit only" lane at an interchange [See Example 4]	At a distance = DSD-C ¹ from the begin taper to exit ramp	At the exit ramp gore ²
	Mainline approach to an interchange exit ramp [See Example 1]	At a distance = DSD-C ¹ from the begin taper to exit ramp	At the exit ramp gore ²
	Mainline approach to an interchange entrance ramp, except an entrance ramp where there is a continuous auxiliary lane to the next downstream interchange exit (see Category 2 for this location). [See Example 5 for Category 3 entrance ramp]	At a distance = DSD-C ¹ from the entrance ramp gore ²	At the end taper from entrance ramp
	Mainline approach to an Interchange with unusual features, e.g. multiple entrance or exit points; short weaving sections	At a distance = DSD-C ¹ from the 1st upstream feature, i.e., begin taper to exit ramp, or entrance ramp gore ²	At the last downstream feature, i.e., the exit ramp gore, or the end taper from entrance ramp ²
	High-speed multilane highway approach to an intersection with a left turn in the direction of travel [See Example 6]	At a distance = DSD-C ¹ from the back of the design queue ³	At the CL of the intersection
	Crossroad approach to an interchange ramp terminal intersection where the posted speed is 45 mph or greater	At a distance = DSD-C ¹ from the CL of the ramp terminal intersection	At the CL of the ramp terminal intersection
	Lane drop on freeways or expressways	At a distance = DSD-C ¹ from the start of the lane drop	At the end of the lane drop
	Approach to a major fork on a freeway or expressway	At a distance = DSD-C ¹ from the start of widening	At the point of divergence
	Approach to a branch connection on a freeway or expressway	At a distance = DSD-C ¹ from the point of convergence	At the end of lane reduction [or, if there is no lane reduction, at the point of convergence]

Notes

- 1 DSD-C = Decision Sight Distance Avoidance Maneuver C (see table on [Attachment 5.1](#))
- 2 Gore = "painted nose" as defined on p.832 and as depicted in Exhibit 10-59 on p.833 of the 2004 GDHS
- 3 Check queue lengths for the thru, left turn and/or right turn movement, and use whichever is furthest from the intersection. See [FDM 11-25-1](#), [FDM 11-25-5](#), and [FDM 11-25-10](#) for guidance on queue length requirements. Also, confer with region traffic staff.

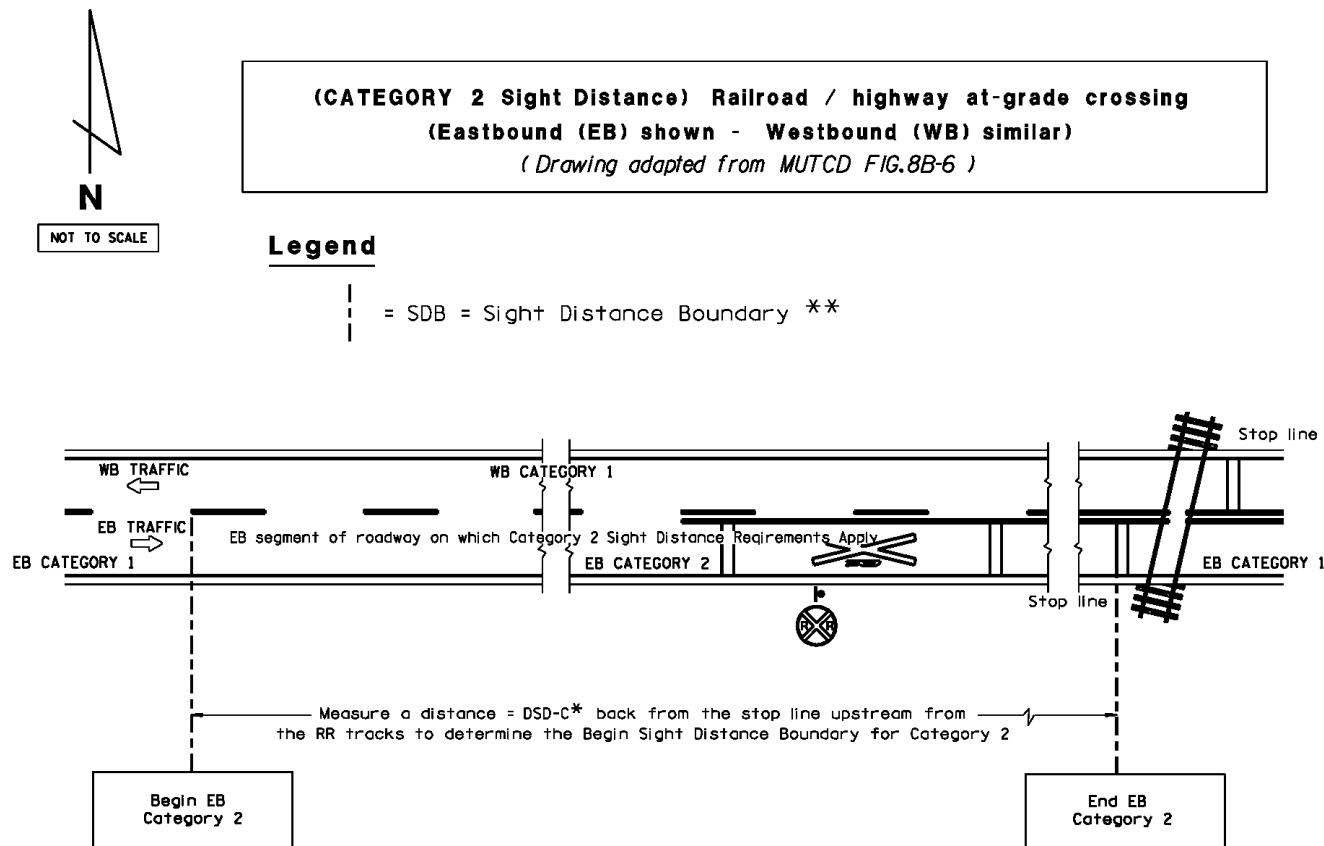
Example 1 – Sight Distance Category 2 – Mainline approach to an Interchange entrance ramp where there is a continuous auxiliary lane to the next downstream interchange exit / Sight Distance Category 3 – Mainline approach to an interchange exit ramp



* DSD-C = Decision Sight Distance Avoidance Maneuver C (see table on p.1 of this Attachment)

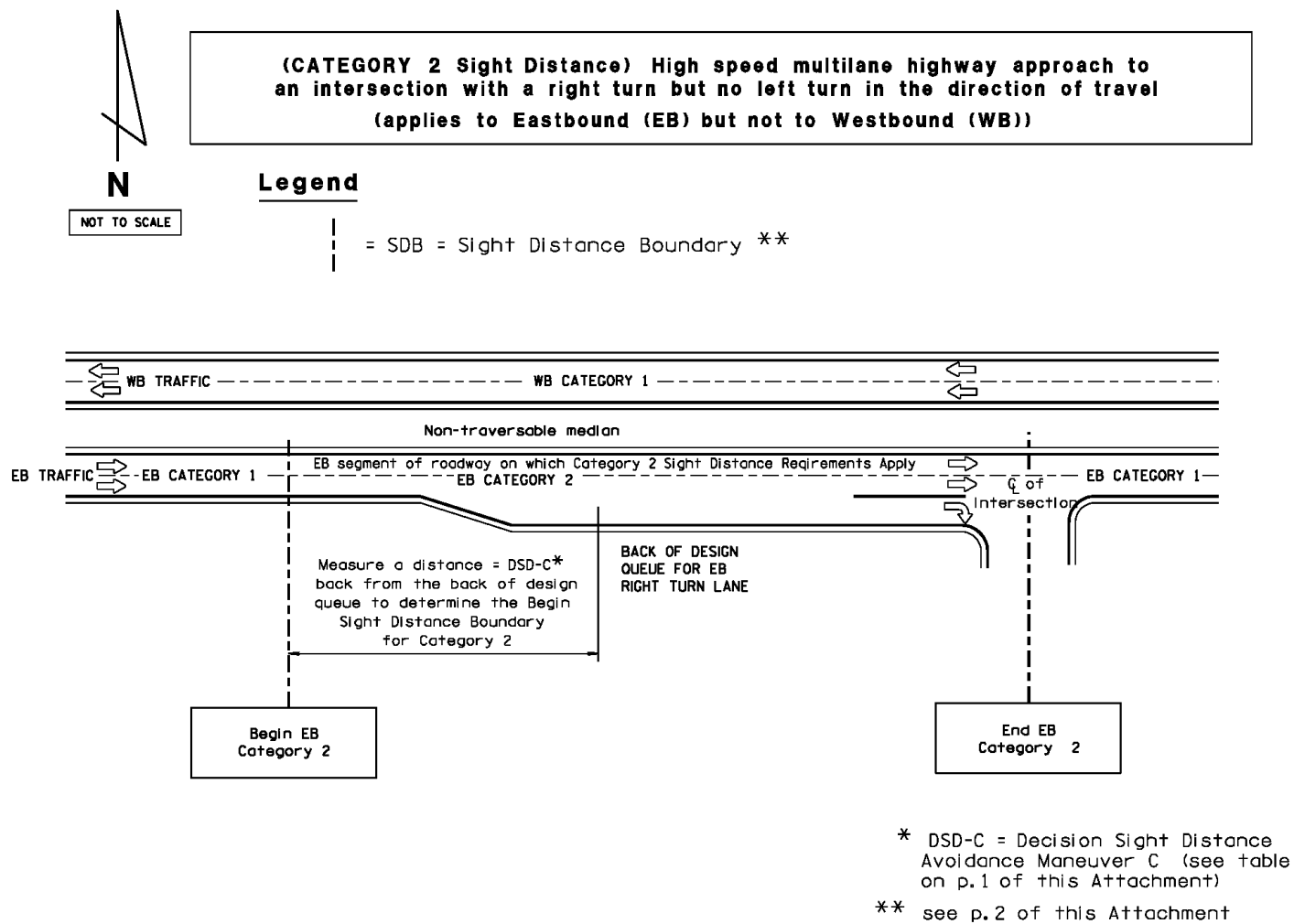
** see p.2-3 of this Attachment

Example 2 – Sight Distance Category 2 – Railroad / highway at-grade crossings

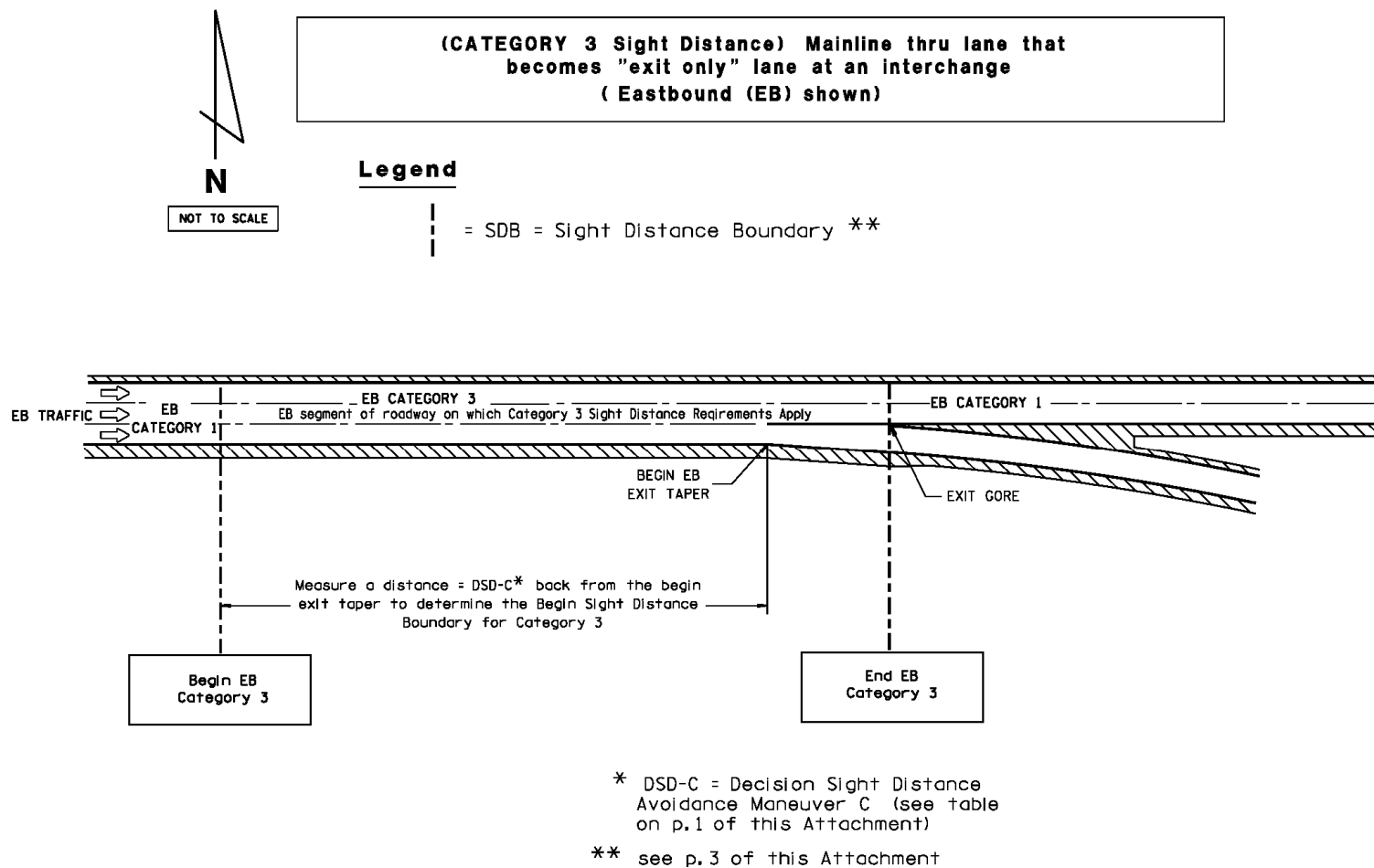


* DSD-C = Decision Sight Distance Avoidance Maneuver C (see table on p.1 of this Attachment)

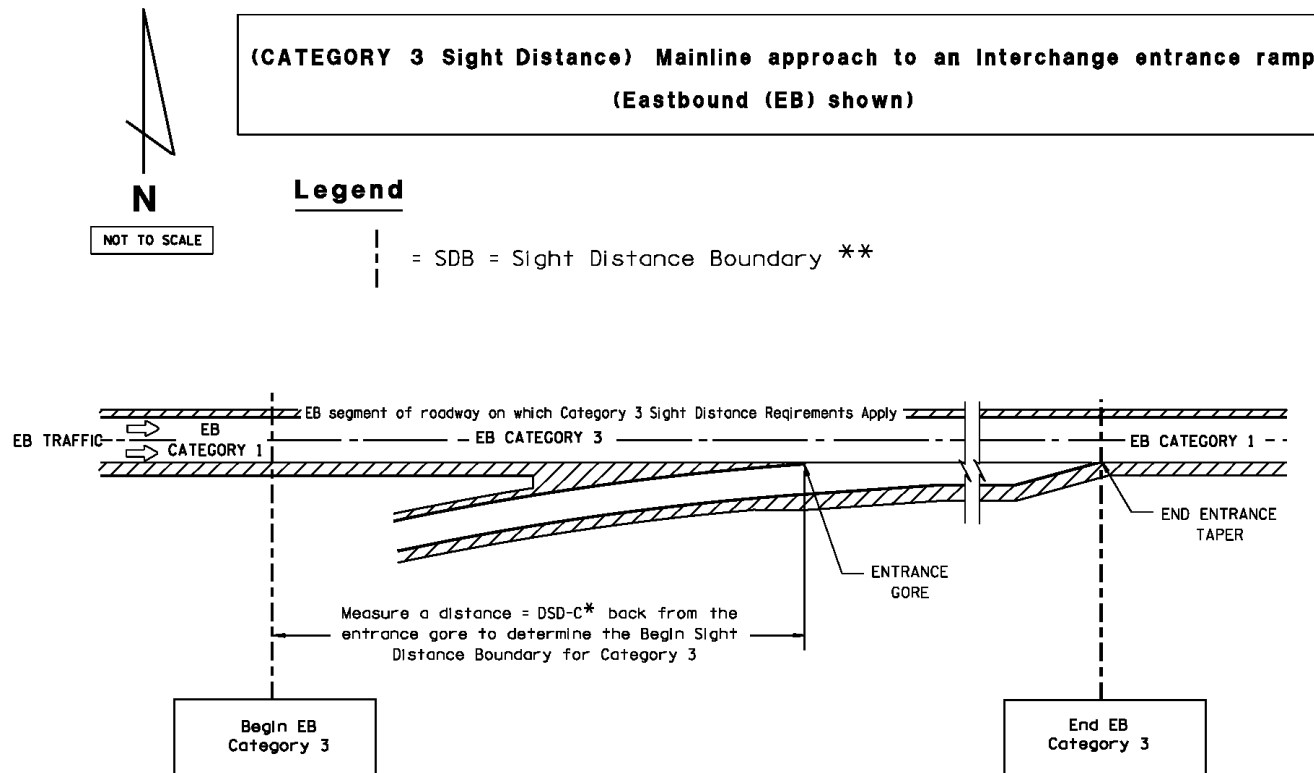
** see p.2 of this Attachment

Example 3 – Sight Distance Category 2 – High speed multilane highway approach to an intersection with a right turn but no left turn in the direction of travel

Example 4 – Sight Distance Category 3 – Mainline thru lane that becomes an "exit only" lane at an interchange



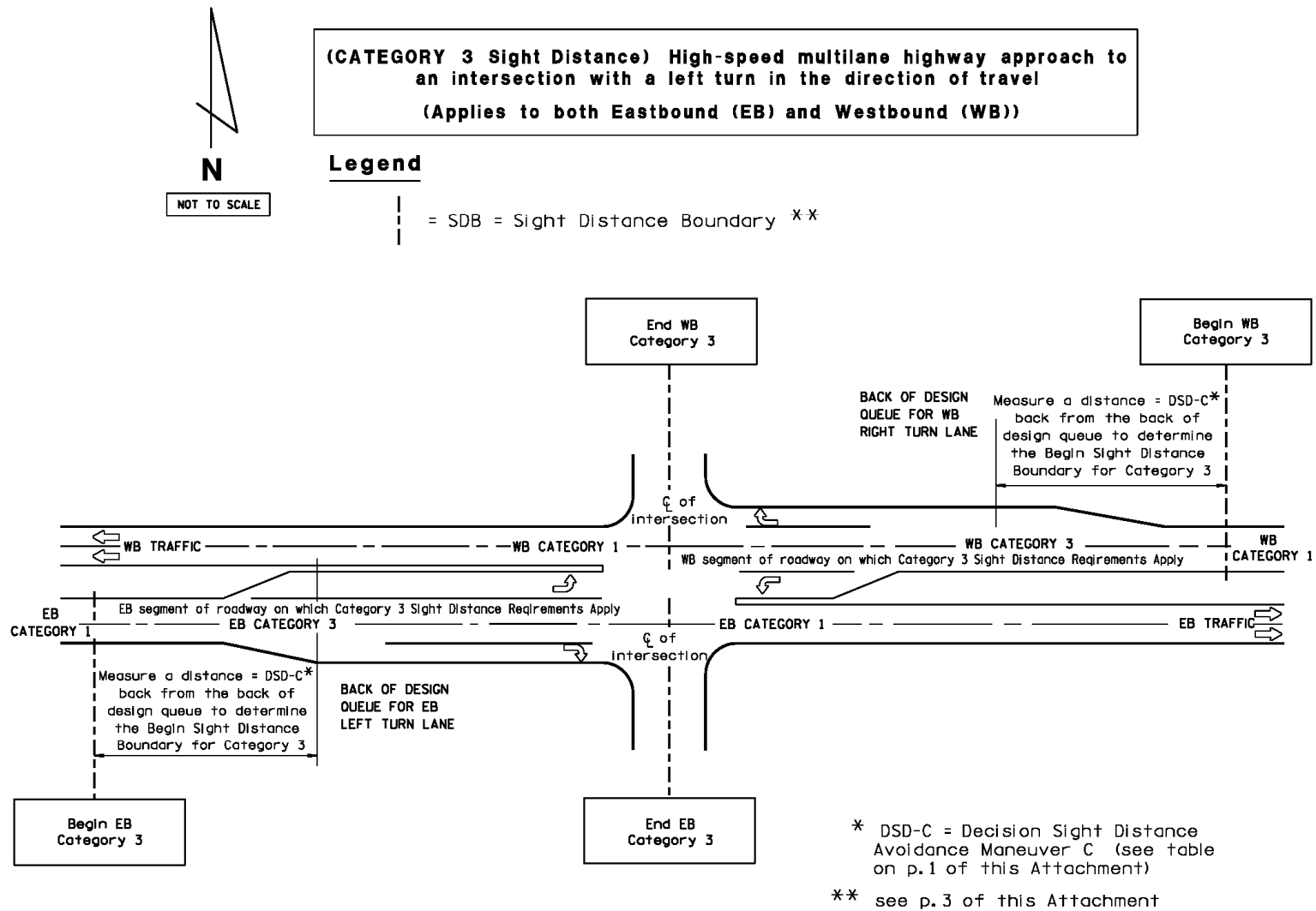
Example 5 – Sight Distance Category 3 – Mainline approach to an interchange entrance ramp



* $DSD-C$ = Decision Sight Distance Avoidance Maneuver C (see table on p.1 of this Attachment)

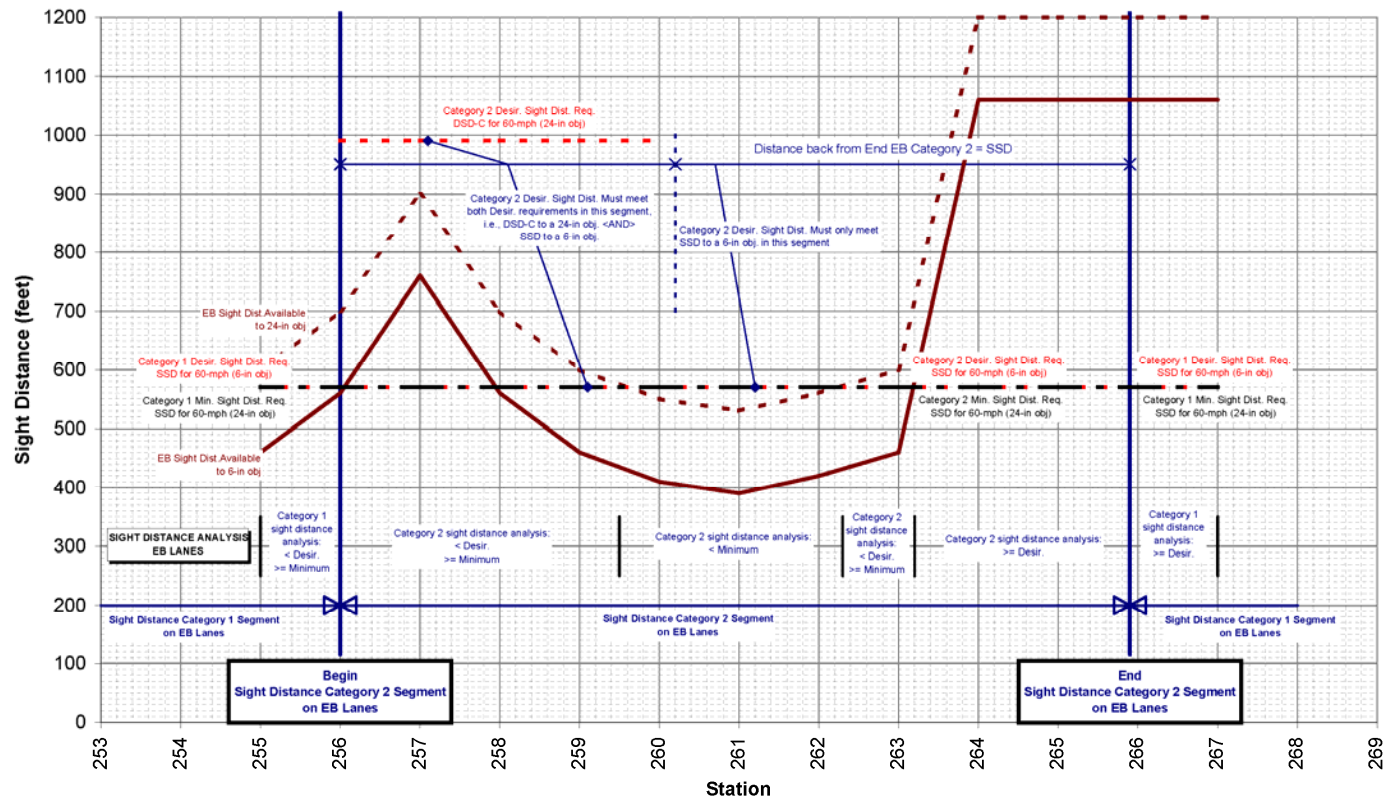
** see p.3 of this Attachment

Example 6 – Sight Distance Category 3 – High-speed multilane highway approaches to an intersection with a left turn in the direction of travel



Example 7 – Sight Distance Record and Analysis

Example Sight Distance Record and Analysis (EB lanes shown - do similar analysis for WB lanes)



Plot the segment boundaries for the applicable Sight Distance Categories (Categories 1 & 2 in the above example). See the tables on pp.2-4 of this Attachment. Also, see Examples 5.1-5.6 of this Attachment.

Plot the Sight Distance Requirements for each Sight Distance Category segment – see the tables on [Attachment 5.1](#).

Measure and record the available sight distance as described starting on p.128 of the 2004 AASHTO GDHS. The above example shows available sight distance to both a 6-inch object and to a 24-inch object. Eye height is 3.5-feet in both cases.

Compare the Sight Distance Requirement with the measured sight distance available to determine if the Sight Distance Requirement is met.

Maximum Grades (%) for Rural Highways by Functional Classification ¹

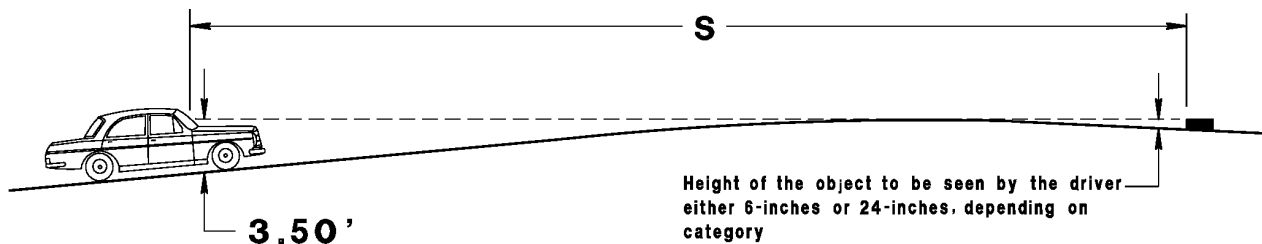
RURAL ARTERIALS ²						
TYPE OF TERRAIN ⁵	DESIGN SPEED					
	20 MPH	30 MPH	40 MPH	50 MPH	60 MPH	70 MPH
LEVEL	-	-	-	4	3	3
ROLLING	-	-	-	5	4	4

RURAL COLLECTORS ³						
TYPE OF TERRAIN ⁵	DESIGN SPEED					
	20 MPH	30 MPH	40 MPH	50 MPH	60 MPH	70 MPH
LEVEL	7	7	7	6	5	-
ROLLING	10	9	8	7	6	-

RURAL LOCAL ROADS ⁴						
TYPE OF TERRAIN ⁵	DESIGN SPEED					
	20 MPH	30 MPH	40 MPH	50 MPH	60 MPH	70 MPH
LEVEL	8	7	7	6	5	-
ROLLING	11	10	10	8	6	-

Notes

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- 1 For Max. Grades under Urban Conditions refer to:
- Arterials: GDHS 2004, Exhibit 7-10, Page 472;
 - Freeways: GDHS 2004, Exhibit 8-1, Page 506;
 - Interstate: AASHTO Interstate Design Standards 2005, Page 3;
 - Collectors: GDHS 2004, Exhibit 6-8, Page 432; and
 - Local Streets: GDHS 2004, Page 391
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- 2 See GDHS 2004, Exhibit 7-2, Page 446
 See GDHS 2004, Exhibit 8-1, Page 506 for Freeways
 See AASHTO Interstate Design Standards 2005, Page 3 for Interstates
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- 3 See GDHS 2004, Exhibit 6-4, Page 423
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- 4 See GDHS 2004, Exhibit 5-4, Page 382
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- 5 See Highway Capacity Manual 2000, p.21-8 for a discussion of terrain types
-



Object Height

When $S > L$

When $S < L$

6-inches

$$L = 2S - \frac{1329}{A}$$

$$L = \frac{AS^2}{1329}$$

24-inches

$$L = 2S - \frac{2158}{A}$$

$$L = \frac{AS^2}{2158}$$

L = Length of Vertical Curve (feet)

A = Algebraic Grade Difference (Percent)

S = Sight Distance (feet) (either SSD or DSD required, depending on category)

$K = L/A$; $L = K \times A$

Crest Vertical Curves - Sight Distance, Object Height and Minimum Length Requirements ^E

Design Speed (V) (mph)	Category ^A	DESIRABLE				MINIMUM				Min. VC L = 3 x V (feet) ^D	Category ^A	Design Speed (V) (mph)
		Basis ^B	Sight Distance (feet) ^C	obj. hgt. (inches)	* Kcr	Basis	Sight Distance (feet) ^C	obj. hgt. (inches)	* Kcr			
25	1	SSD	155	6	19	SSD	155	24	12	75	1	25
	2	DSD	375	24	66	SSD	155	24	12	75	2	
	3	DSD	375	24	66	SSD	155	6	19	75	3	
30	1	SSD	200	6	31	SSD	200	24	19	90	1	30
	2	DSD	450	24	94	SSD	200	24	19	90	2	
	3	DSD	450	24	94	SSD	200	6	31	90	3	
35	1	SSD	250	6	48	SSD	250	24	29	105	1	35
	2	DSD	525	24	128	SSD	250	24	29	105	2	
	3	DSD	525	24	128	SSD	250	6	48	105	3	
40	1	SSD	305	6	70	SSD	305	24	44	120	1	40
	2	DSD	600	24	167	SSD	305	24	44	120	2	
	3	DSD	600	24	167	SSD	305	6	70	120	3	
45	1	SSD	360	6	98	SSD	360	24	61	135	1	45
	2	DSD	675	24	212	SSD	360	24	61	135	2	
	3	DSD	675	24	212	SSD	360	6	98	135	3	
50	1	SSD	425	6	136	SSD	425	24	84	150	1	50
	2	DSD	750	24	261	SSD	425	24	84	150	2	
	3	DSD	750	24	261	SSD	425	6	136	150	3	
55	1	SSD	495	6	185	SSD	495	24	114	165	1	55
	2	DSD	865	24	347	SSD	495	24	114	165	2	
	3	DSD	865	24	347	SSD	495	6	185	165	3	
60	1	SSD	570	6	245	SSD	570	24	151	180	1	60
	2	DSD	990	24	455	SSD	570	24	151	180	2	
	3	DSD	990	24	455	SSD	570	6	245	180	3	
65	1	SSD	645	6	314	SSD	645	24	193	195	1	65
	2	DSD	1050	24	511	SSD	645	24	193	195	2	
	3	DSD	1050	24	511	SSD	645	6	314	195	3	
70	1	SSD	730	6	401	SSD	730	24	247	210	1	70
	2	DSD	1105	24	566	SSD	730	24	247	210	2	
	3	DSD	1105	24	566	SSD	730	6	401	210	3	

Notes

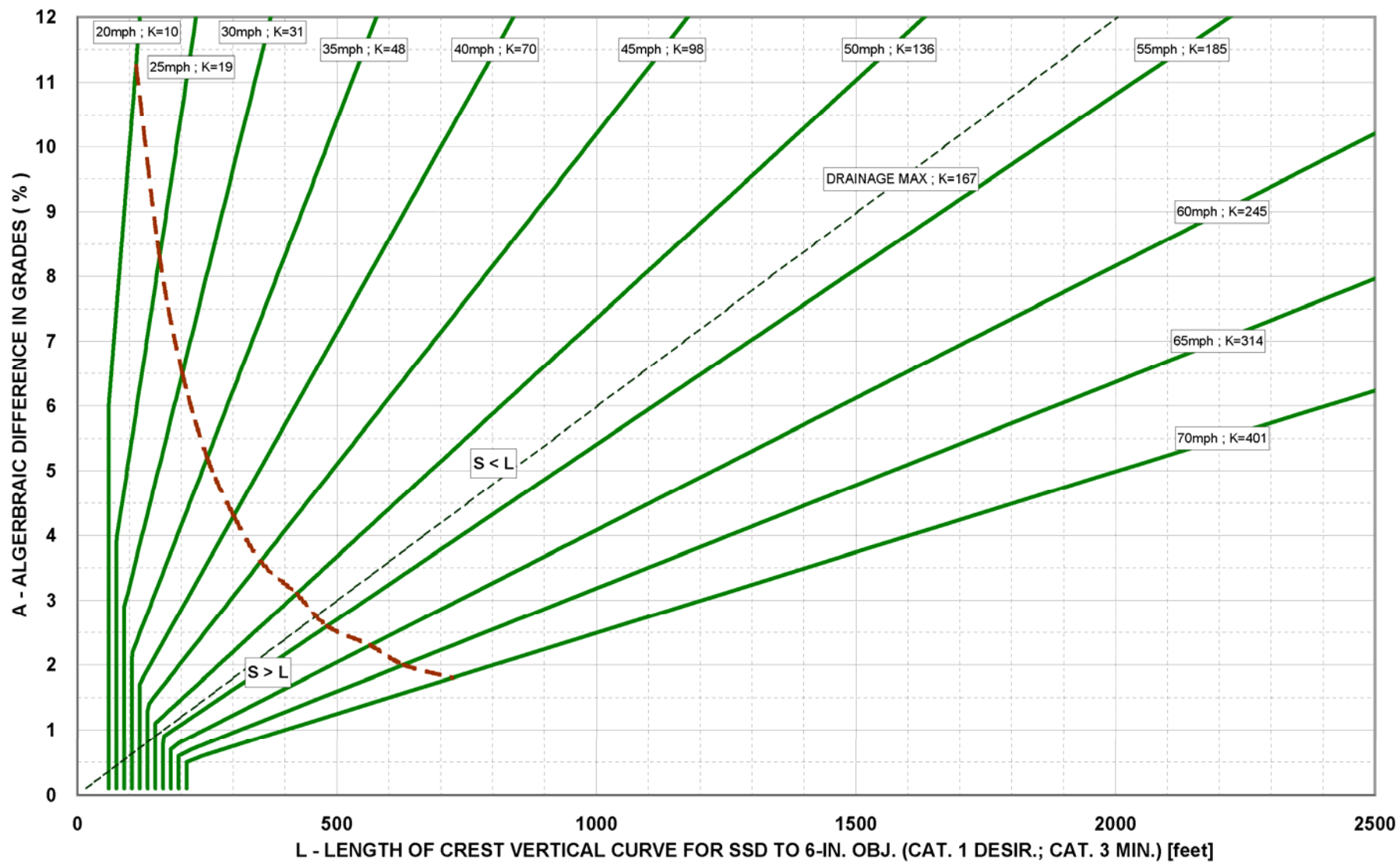
A See section "Stopping Sight Distance (SSD); Decision Sight Distance (DSD)" in text, and p.2 of Attachment 1 for definitions and criteria for Sight Distance Categories

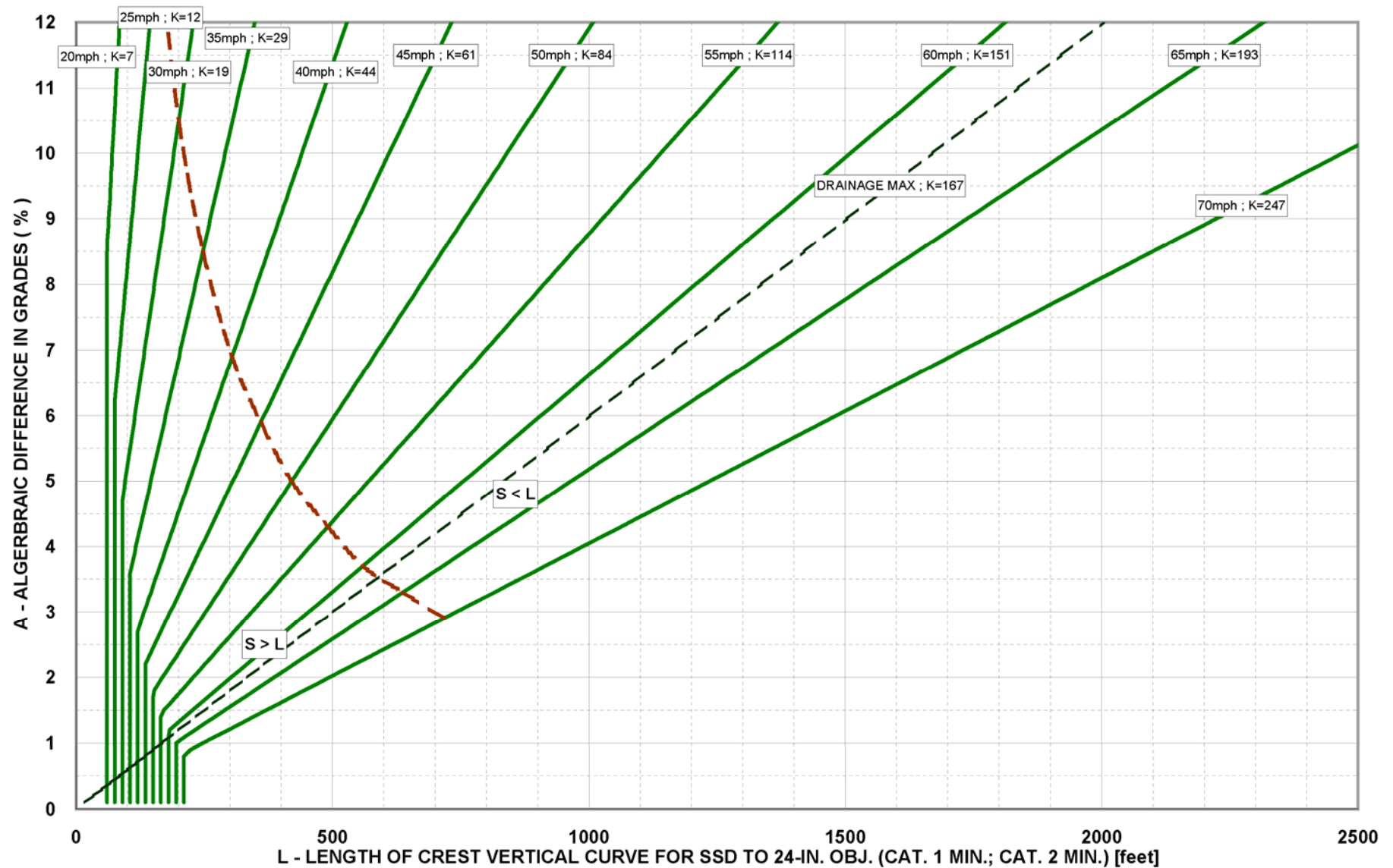
B SSD = Stopping Sight Distance
DSD = Decision Sight Distance for Avoidance Maneuver C

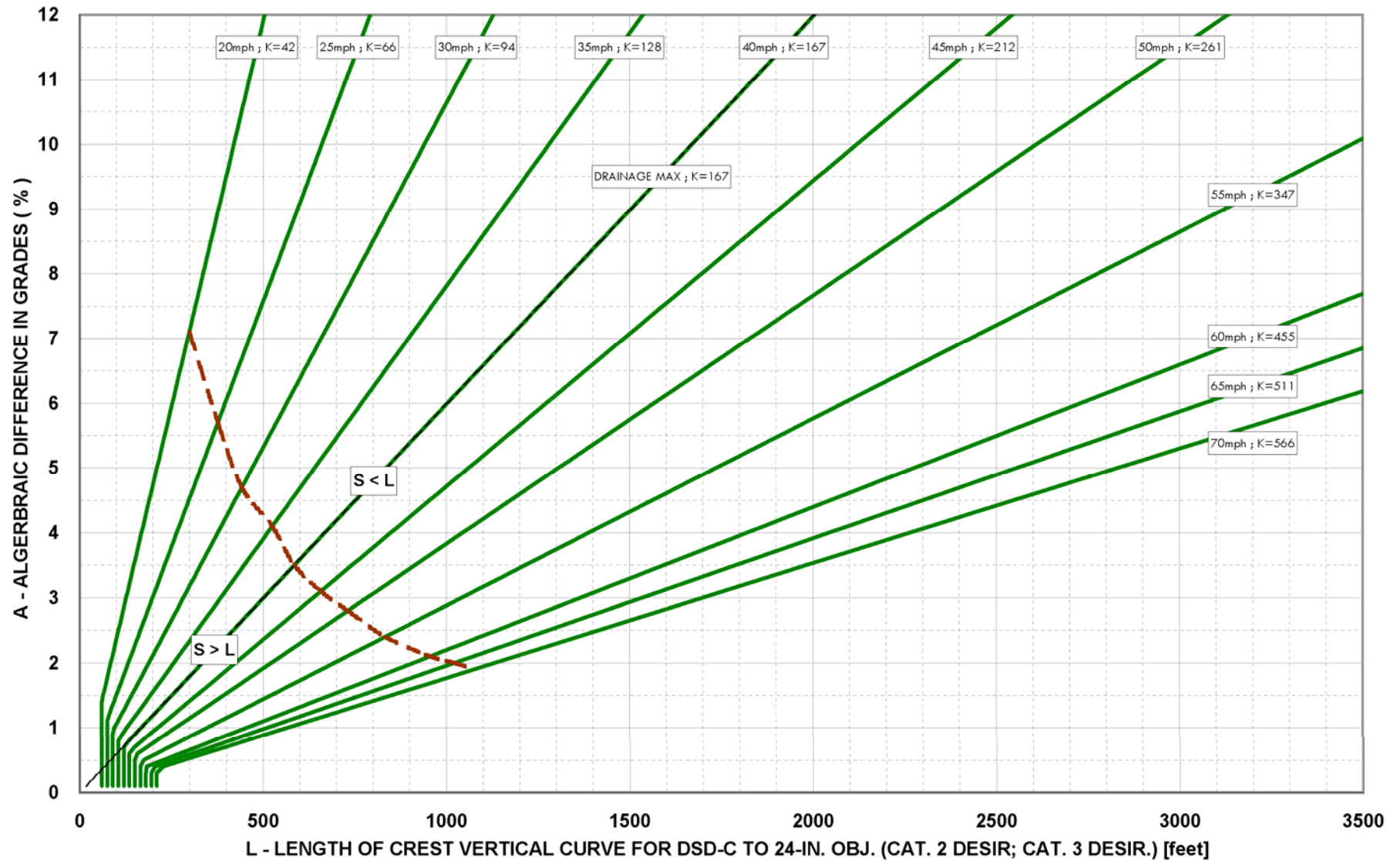
C See page 1 of [Attachment 5.1](#)

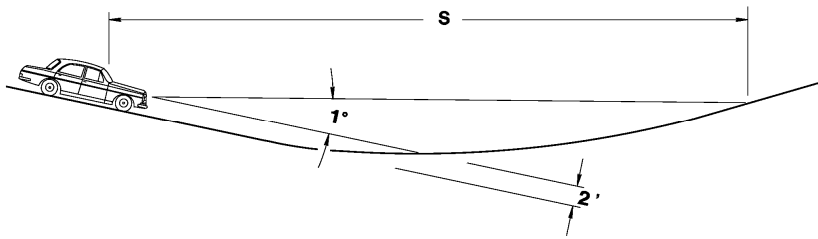
D Minimum length of crest vertical curve = the greater of either ($Kcr \times A$), OR a distance in feet equal to 3 x the design speed in mph ($3 \times V$)

E See [Attachment 5.5](#) for graphs of L vs. A vs. Design Speed for crest vertical curves









When $S > L$	When $S < L$
$L = 2S - \left[\frac{(400 + 3.5 \times S)}{A} \right]$	$L = \frac{(A \times S^2)}{(400 + 3.5 \times S)}$

L = Length of Vertical Curve (feet)

S = Sight Distance (feet) (either SSD or DSD required, depending on category)

A = Algebraic Grade Difference (Percent)

$K = L/A$; $L = KA$

Sag Vertical Curves - Sight Distance and Minimum Length Requirements ^E

Design Speed (V) (mph)	Category ^A	Desirable			Minimum			Min. VC L = 3 x V (feet) ^D	Category ^A	Design Speed (V) (mph)
		Basis ^B	Sight Distance (feet) ^C	K_{SAG}	Basis	Sight Distance (feet) ^C	K_{SAG}			
25	1	SSD	155	26	SSD	155	26	75	1	25
	2	DSD	375	83	SSD	155	26	75	2	
	3	DSD	375	83	SSD	155	26	75	3	
30	1	SSD	200	37	SSD	200	37	90	1	30
	2	DSD	450	103	SSD	200	37	90	2	
	3	DSD	450	103	SSD	200	37	90	3	
35	1	SSD	250	49	SSD	250	49	105	1	35
	2	DSD	525	124	SSD	250	49	105	2	
	3	DSD	525	124	SSD	250	49	105	3	
40	1	SSD	305	64	SSD	305	64	120	1	40
	2	DSD	600	144	SSD	305	64	120	2	
	3	DSD	600	144	SSD	305	64	120	3	
45	1	SSD	360	79	SSD	360	79	135	1	45
	2	DSD	675	165	SSD	360	79	135	2	
	3	DSD	675	165	SSD	360	79	135	3	
50	1	SSD	425	96	SSD	425	96	150	1	50
	2	DSD	750	186	SSD	425	96	150	2	
	3	DSD	750	186	SSD	425	96	150	3	
55	1	SSD	495	115	SSD	495	115	165	1	55
	2	DSD	865	219	SSD	495	115	165	2	
	3	DSD	865	219	SSD	495	115	165	3	
60	1	SSD	570	136	SSD	570	136	180	1	60
	2	DSD	990	254	SSD	570	136	180	2	
	3	DSD	990	254	SSD	570	136	180	3	
65	1	SSD	645	157	SSD	645	157	195	1	65
	2	DSD	1050	271	SSD	645	157	195	2	
	3	DSD	1050	271	SSD	645	157	195	3	
70	1	SSD	730	181	SSD	730	181	210	1	70
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	3	DSD	1105	287	SSD	730	181	210	3	

Notes

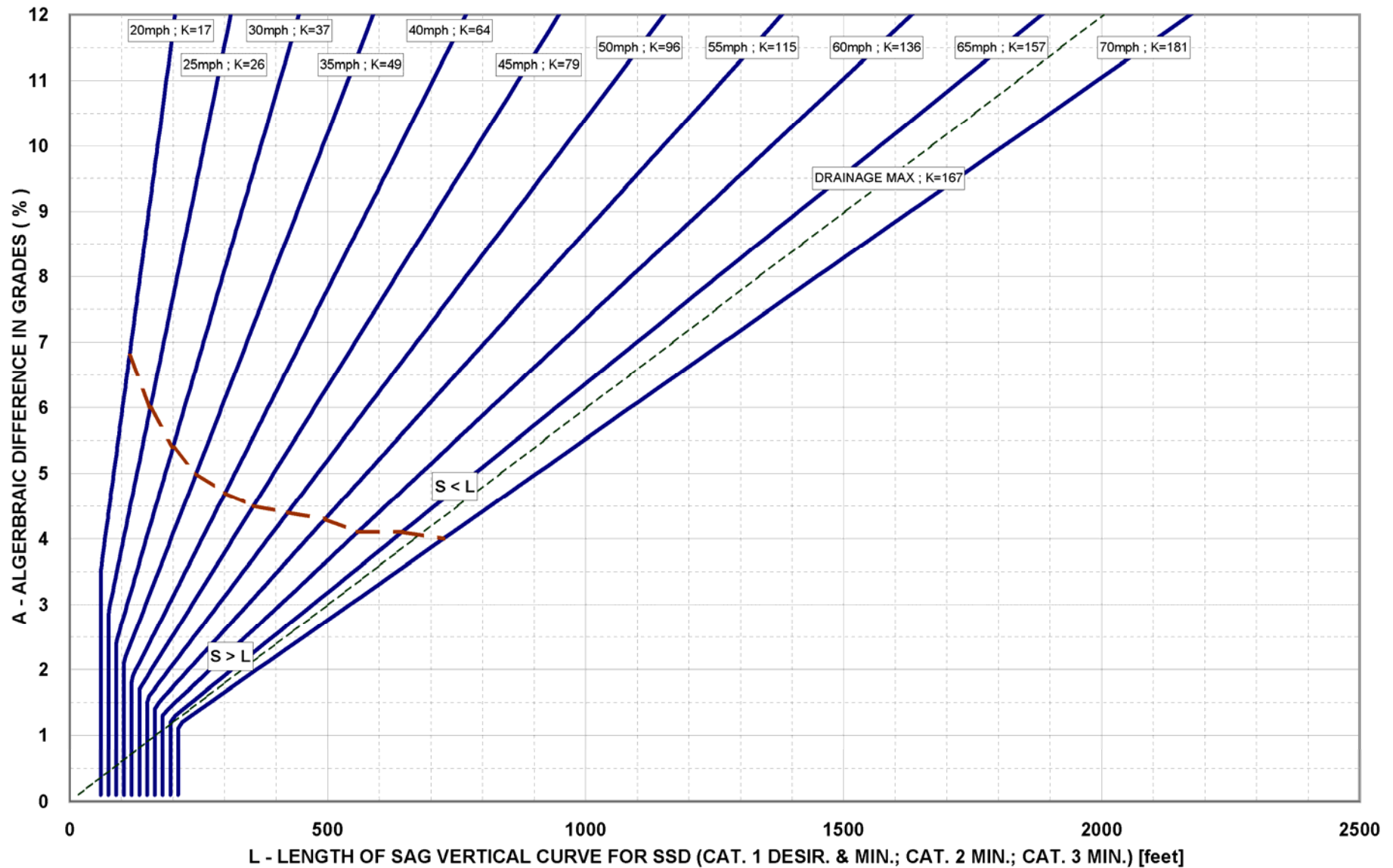
A See section "Stopping Sight Distance (SSD); Decision Sight Distance (DSD)" in text, and p.2 of Attachment 1 for definitions and criteria for Sight Distance Categories

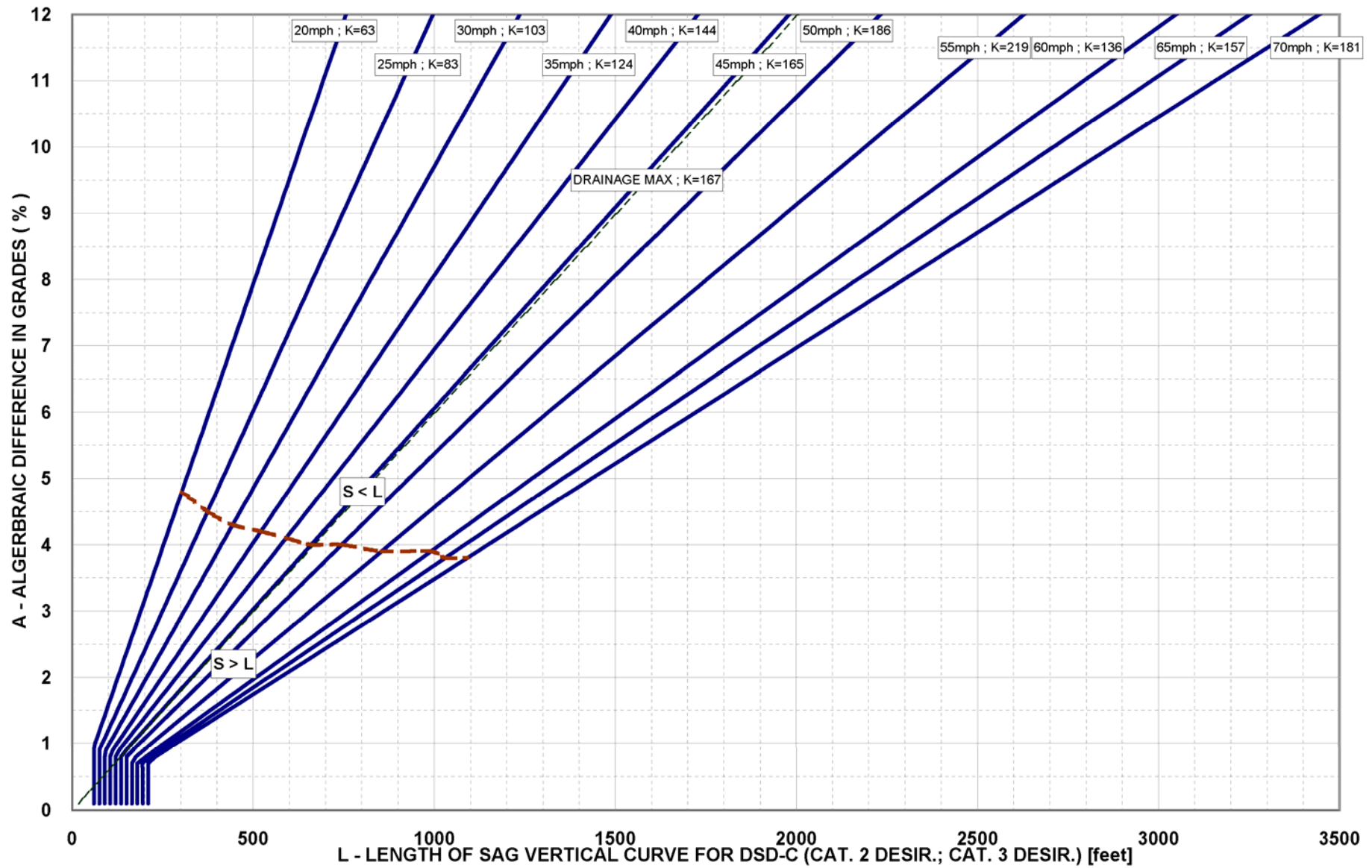
B SSD = Stopping Sight Distance
DSD = Decision Sight Distance for Avoidance Maneuver C

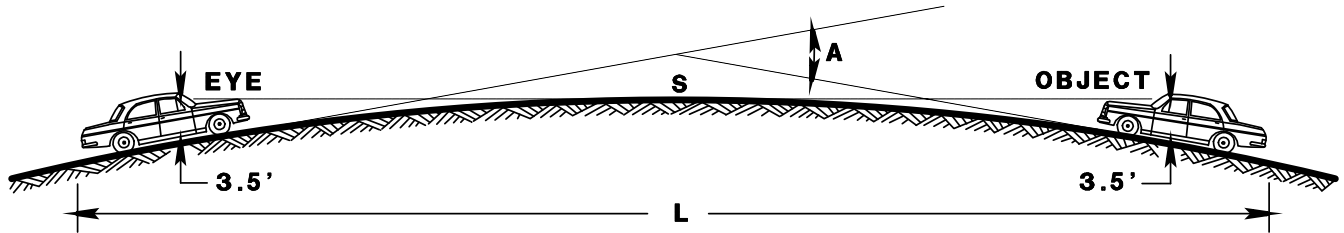
C See page 1 of [Attachment 5.1](#)

D Minimum length of sag vertical curve = the greater of either ($K_{SAG} \times A$), OR a distance in feet equal to 3 x the design speed in mph (3 x V)

E See [Attachment 5.7](#) for graphs of L vs. A vs. Design Speed for sag vertical curves



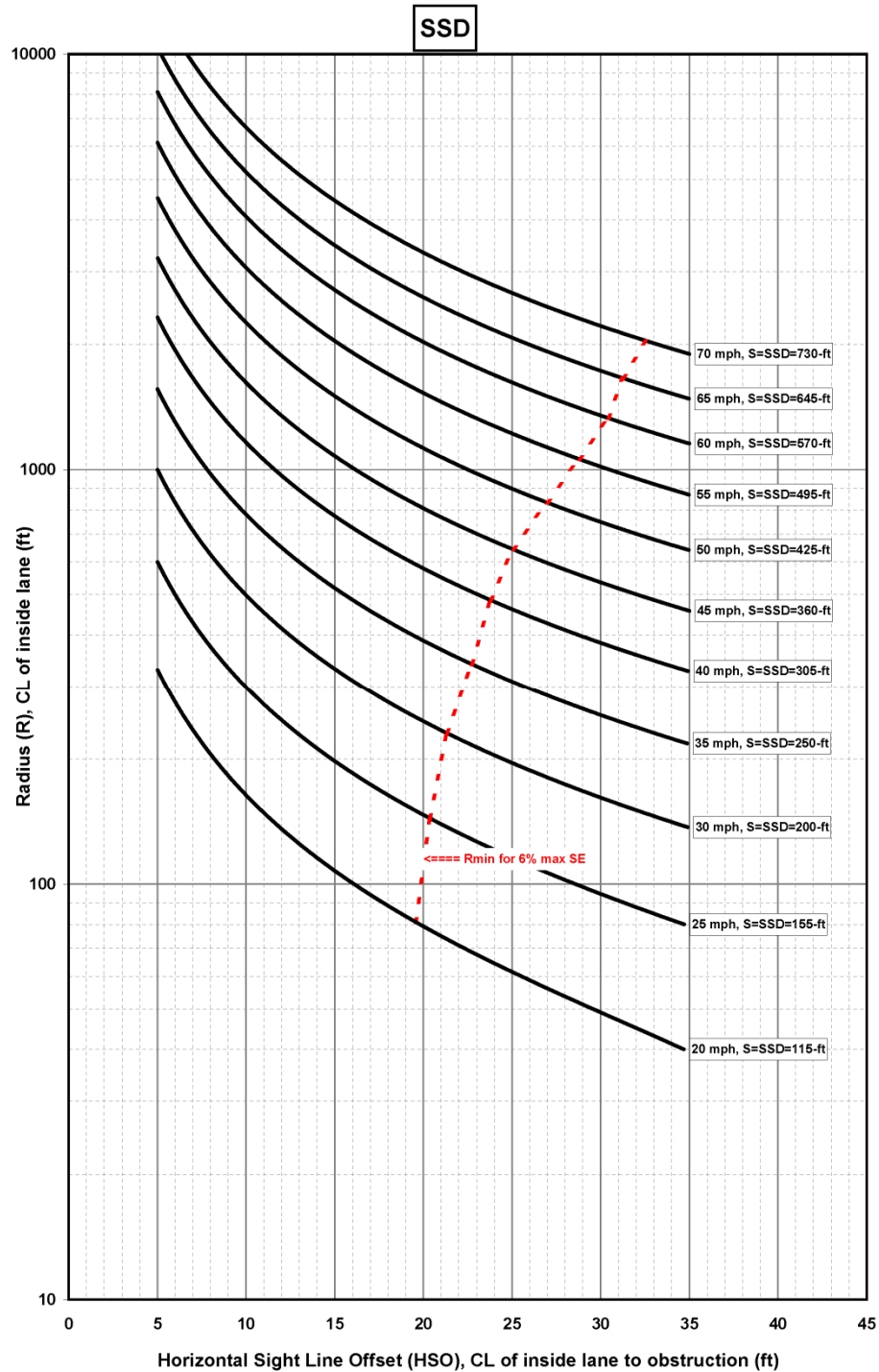
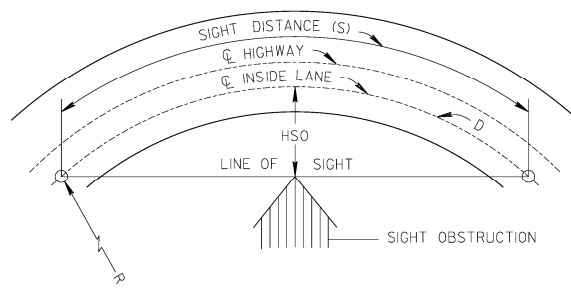


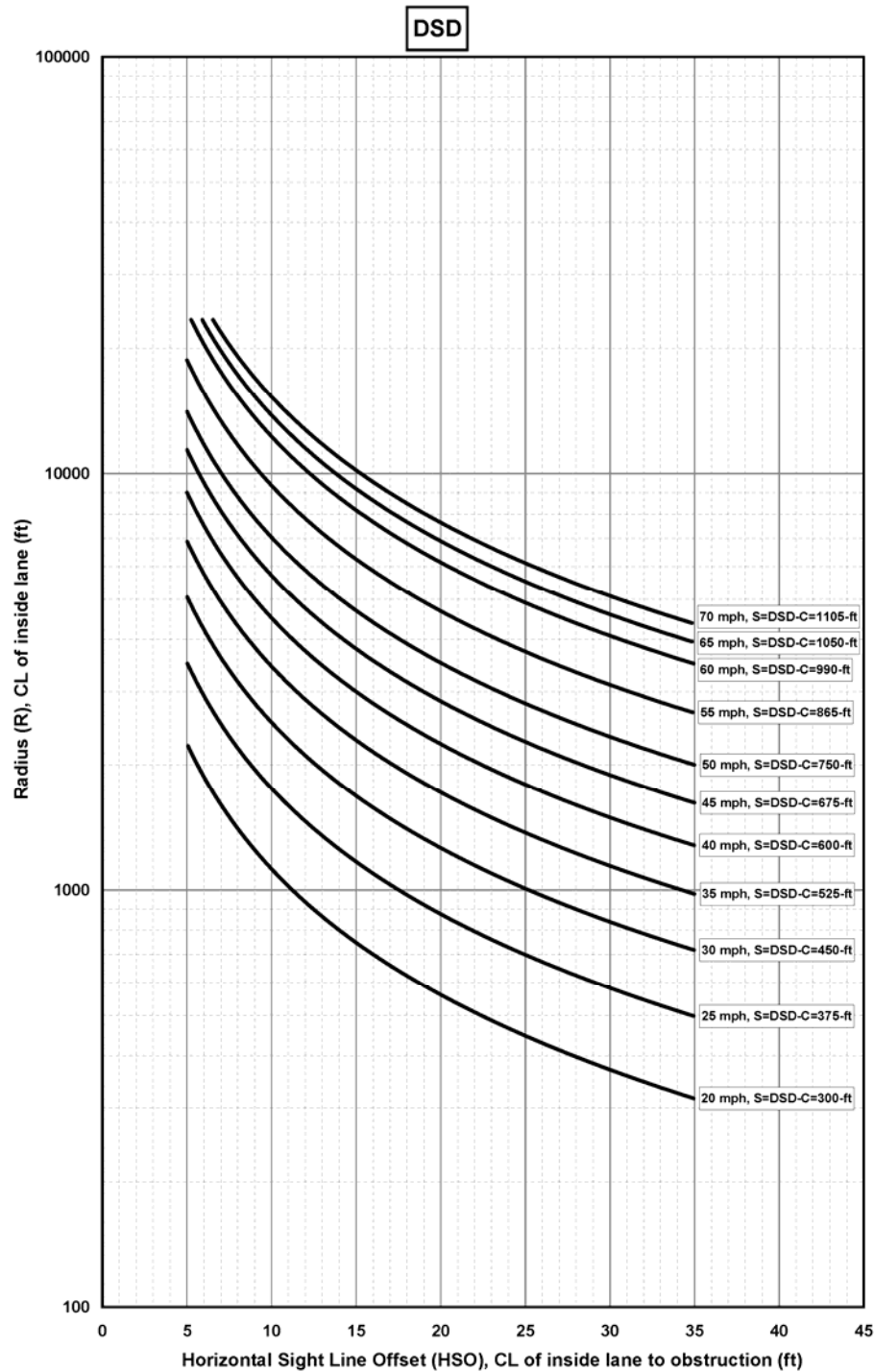
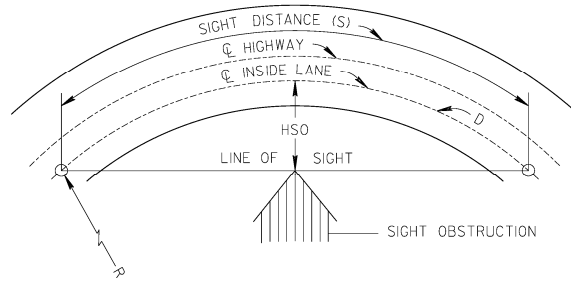
Passing Sight Distance for Crest Vertical Curves

When $S > L$	When $S < L$
$L = 2S - \frac{2800}{A}$	$L = \frac{AS^2}{2800}$
L = Length of Vertical Curve (feet) A = Algebraic Grade Difference (Percent) S = Sight Distance (feet)	

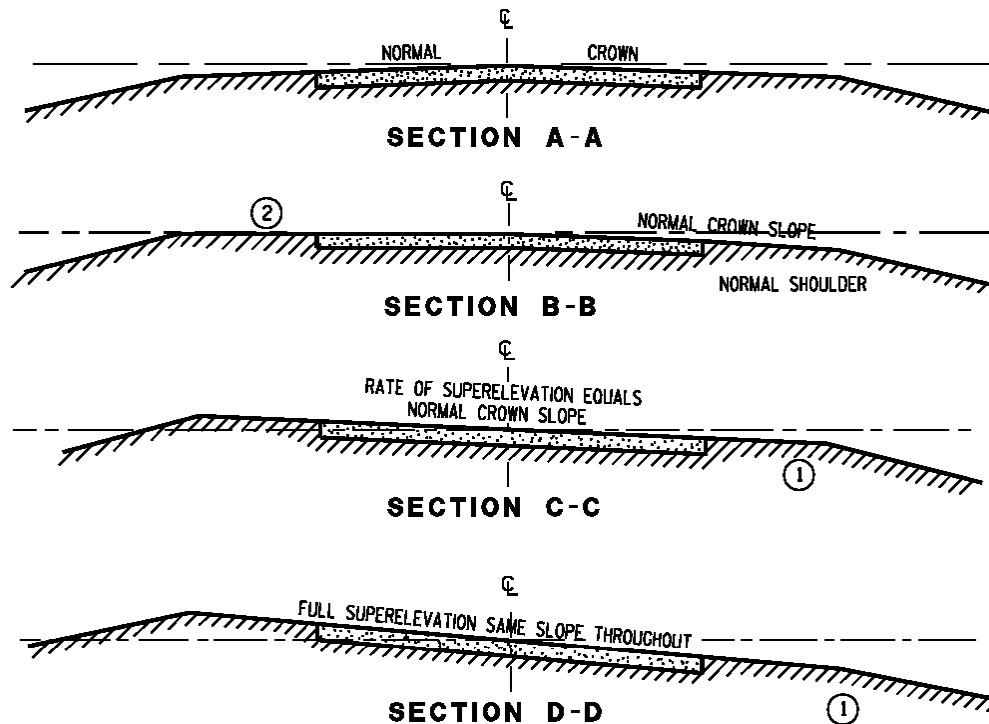
Design Speed (mph)	AASHTO Passing Sight Distance	Minimum Crest K Value to achieve PSD
25	900	289
30	1090	424
35	1280	585
40	1470	772
45	1625	943
50	1835	1203
55	1985	1407
60	2135	1628
65	2285	1865
70	2480	2197

Source: A Policy on Geometric Design of Highway and Streets, AASHTO 2004

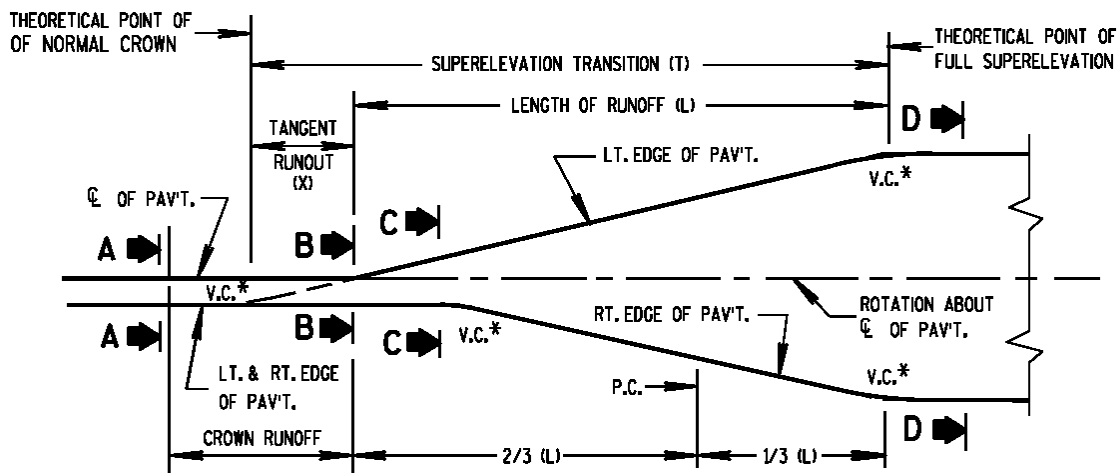




Design Controls for Decision Sight Distance for Avoidance Maneuver C (DSD-C) on Horizontal Curves



* ANGULAR BREAKS MUST BE APPROPRIATELY ROUNDED, SUGGESTED VERTICAL CURVE LENGTH IN FEET = DESIGN SPEED IN MPH (FOR EXAMPLE, 50-FT FOR 50 MPH) (SEE AASHTO GDHS 2004)



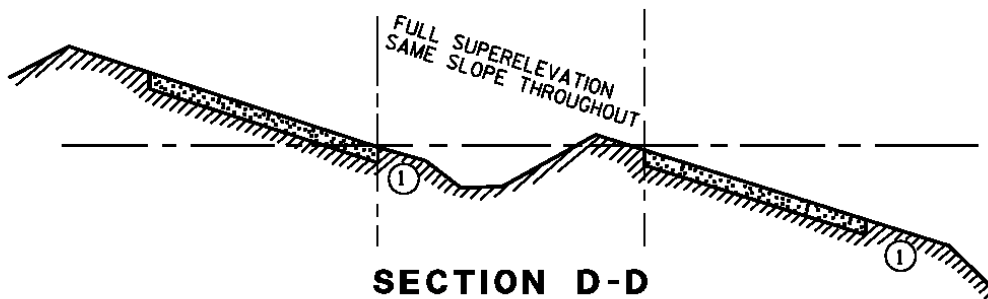
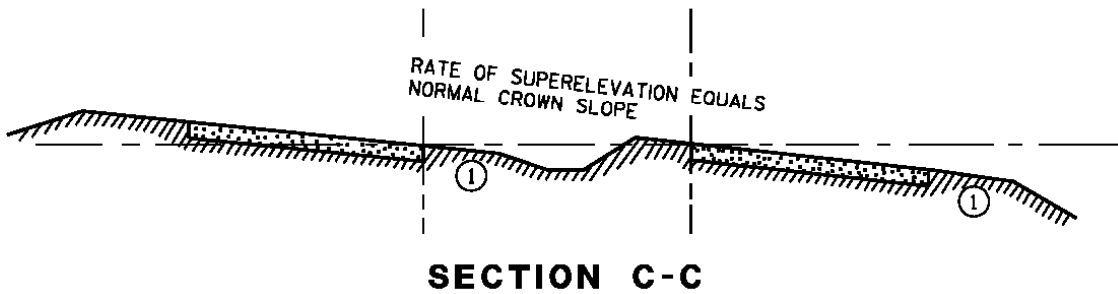
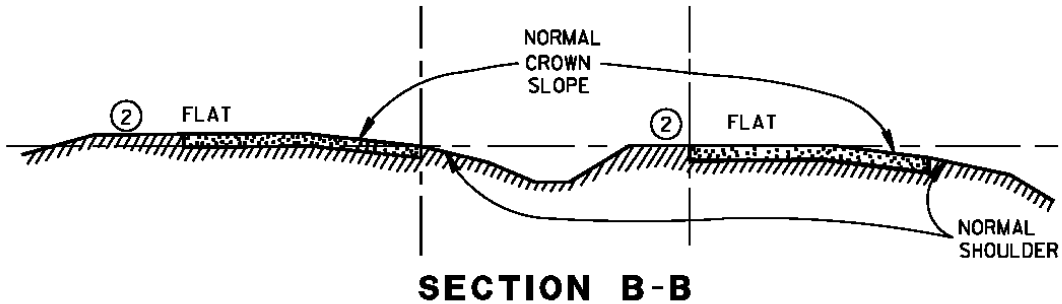
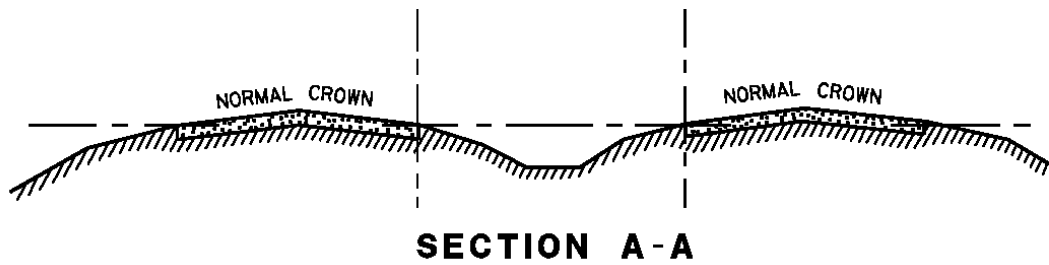
NOTES

- ① When normal shoulder is greater than superelevation retain normal shoulder slope
- ② High-side shoulder slope = FLAT at section B-B

V.C.= Vertical Curve	R.C.= Remove adverse crown slope (section C-C)
P.C.= Beginning of Horizontal Curve	N.C.= Normal crown slope (%)
e = Rate of superelevation (%)	L = Minimum length of Runoff
X = Tangent runoff	

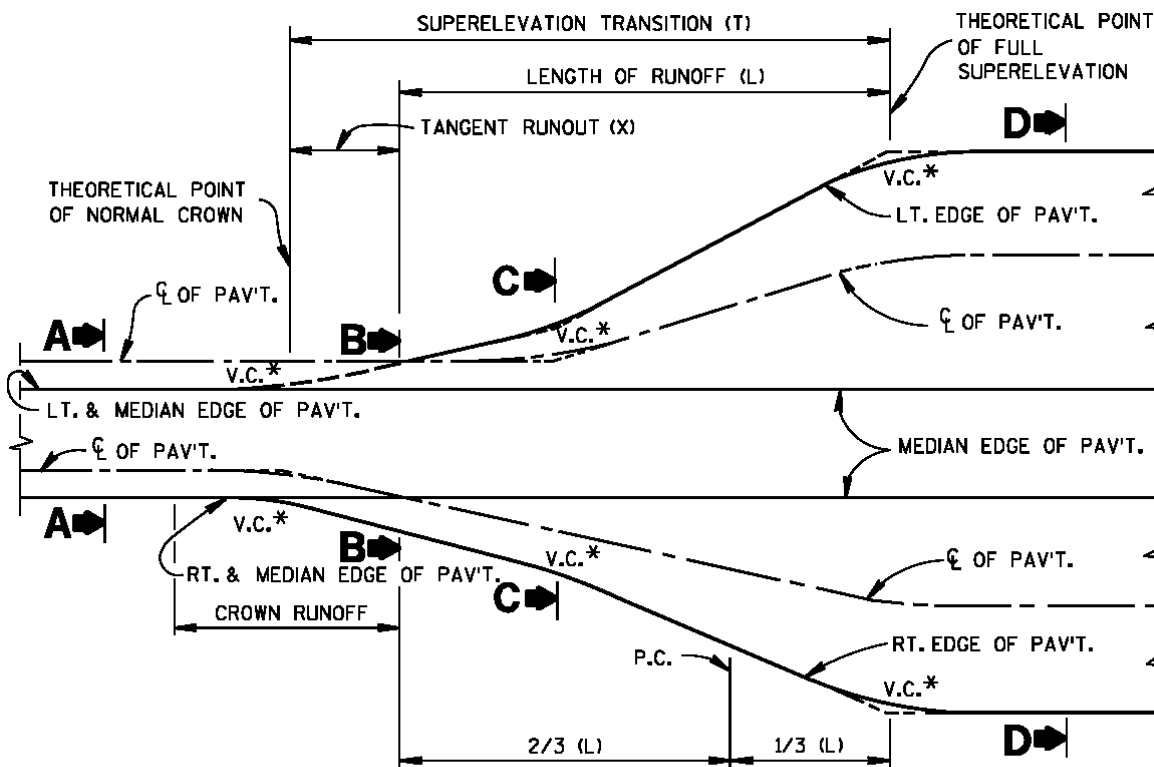
See [Exhibit 5.1](#) for definitions, equations and values for L, X, and T.

Profile and Cross Sections of Two-Lane Highway to the Right



NOTES:

- ① WHEN NORMAL SHOULDER SLOPE IS GREATER THAN SUPERELEVATION, RETAIN NORMAL SHOULDER SLOPE.
- ② HIGH SIDE SHOULDER SLOPE = FLAT AT SECTION B-B



PROFILE

* ANGULAR BREAKS MUST BE APPROPRIATELY ROUNDED, SUGGESTED VERTICAL CURVE LENGTH IN FEET = DESIGN SPEED IN MPH (FOR EXAMPLE, 50-FT FOR 50 MPH) (SEE AASHTO GDHS 2004, EXH. 3-40 AND P. 196 - 197 FOR ADDITIONAL GUIDANCE.)

NOTES:

Superelevation rotation is about median edges of pavement.

N.C.= Normal crown slope, (%)

R.C.= Remove adverse crown slope superelevate at normal crown slope retain slope on both shoulders.

P.C.= Beginning of Horizontal Curve

V.C.= Vertical Curve

e = Rate of superelevation (%)

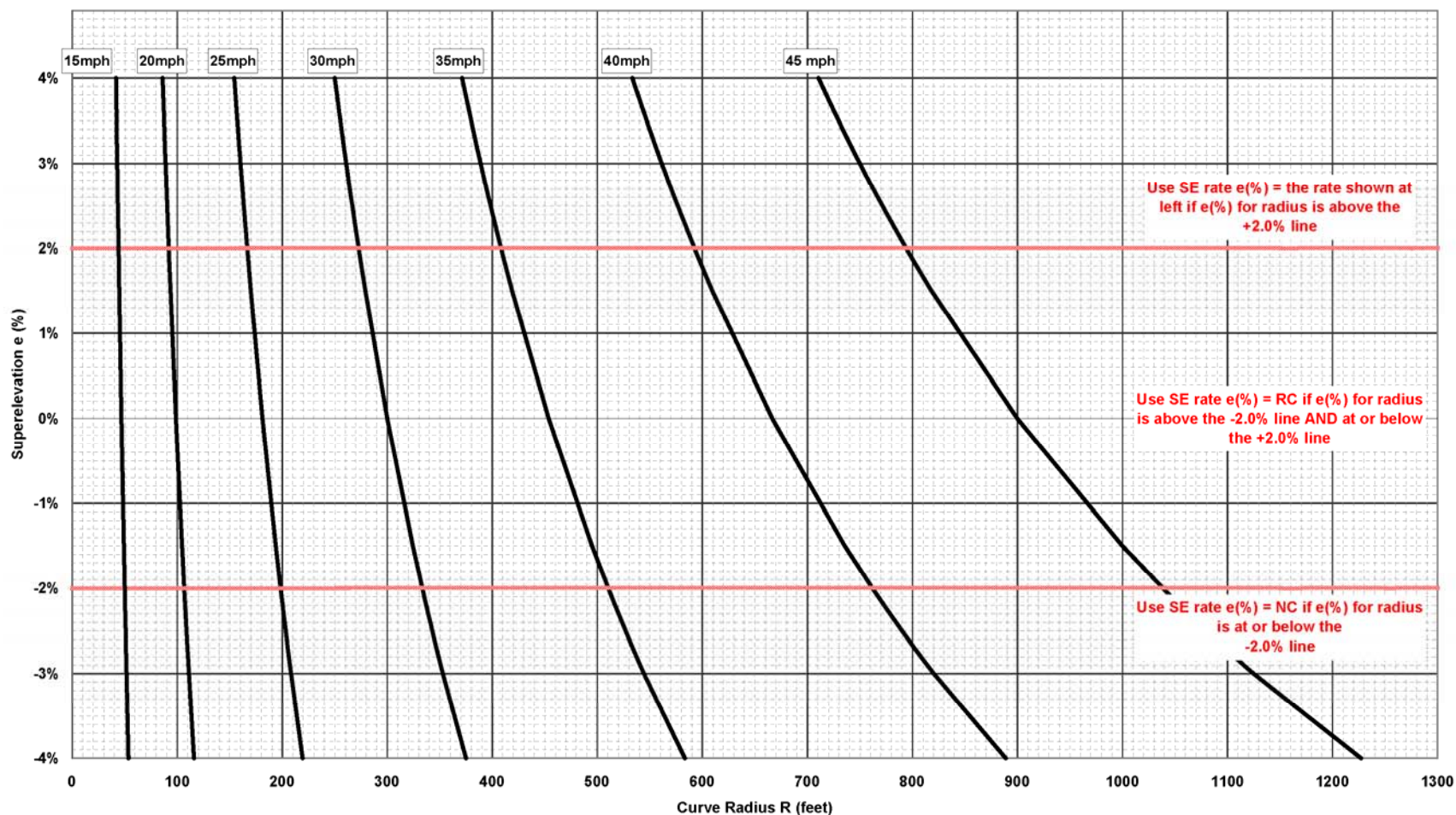
L = Minimum length of Runoff

X = Tangent runout

See [Exhibit 5.1](#) for definitions, equations and values for L, X, and T.

Profile and Cross Sections of Divided Highway Curve to Right

Superelevation for Given Radius and Design Speed for Low-Speed Urban Street Design

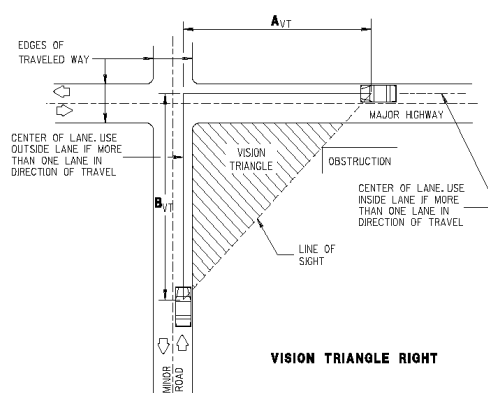
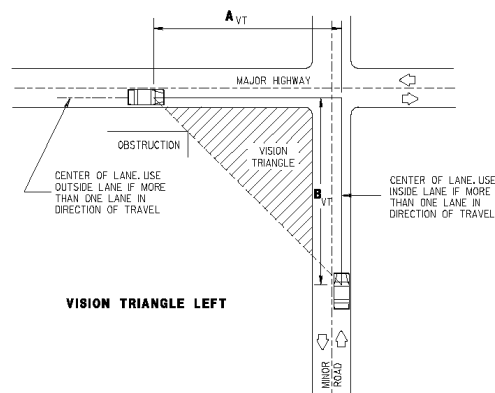


Relationship of Radius Superelevation, Cross Slope, & Design Speed for Low-Speed Urban Street Design (adapted from GDHS 2004, Exh. 3-17)

Notes

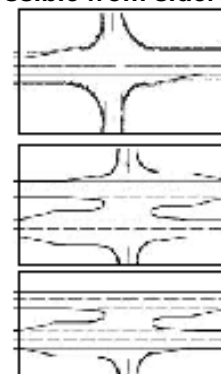
1. Compute L , X , and T for superelevation on low-speed urban streets in the same way as for other roadways [see [Exhibit 5.1](#)]
2. Low-speed urban streets with existing superelevation that meets the requirements of the 2001 GDHS (see pp.192-198) may retain that superelevation if it is impractical to upgrade to the superelevation obtained from this nomograph, unless there is an unacceptable history of curve related crashes.

GUIDE DIMENSIONS FOR VISION TRIANGLES - STOP CONTROL ON MINOR ROAD, OR SIGNAL CONTROLLED INTERSECTION



Example Intersection Layouts

THRU movement possible from sideroad



NO THRU movement possible from sideroad



* Posted Speed (mph)	** Distance "A _{VT} " (feet)	Distance "B _{VT} " (feet)	
		THRU movement possible from sideroad	*NO THRU movement possible from sideroad ("T" intersection)
25	90	90	75
30	105	105	75
35	120	120	75
40	135	135	75
45	150	150	75
50	165	165	75
55	180	180	75
65	210	210	75

Example 1	4-LEG INTERSECTION (THRU MOVEMENT POSSIBLE ON SIDEROAD)
GIVEN	POSTED SPEED IS 55 MPH ON THE MAJOR ROAD POSTED SPEED IS 45 MPH ON THE SIDEROAD
SOLUTION	READING FROM THE TABLE: DISTANCE A _{VT} ON MAJOR ROAD = 180 FT DISTANCE B _{VT} ON SIDEROAD = 150 FT
Example 2	T INTERSECTION (NO THRU MOVEMENT POSSIBLE ON SIDEROAD)
GIVEN	POSTED SPEED IS 55 MPH ON THE MAJOR ROAD POSTED SPEED IS 45 MPH ON THE SIDEROAD
SOLUTION	READING FROM THE TABLE: DISTANCE A _{VT} ON MAJOR ROAD = 180 FT DISTANCE B _{VT} ON SIDEROAD = 75 FT

* Use the posted speed of the Major Highway to determine distance "A"
Use the posted speed of the sideroad to determine distance "B".

** Based on distance traveled in 2 seconds at Posted speed + 5 mph.

*** Based on distance traveled in 2 seconds at 25 mph because vehicle approaching intersection on sideroad has to slow down to make a turn.

NO THRU Movement means either existing or proposed.

NOTES:

Distances are approximate and may be adjusted to fit site conditions.

These guidelines are for the Vision Triangle only, and are not to be interpreted as Intersection Sight Distance (ISD) or Stopping Sight Distance (SSD) requirements.

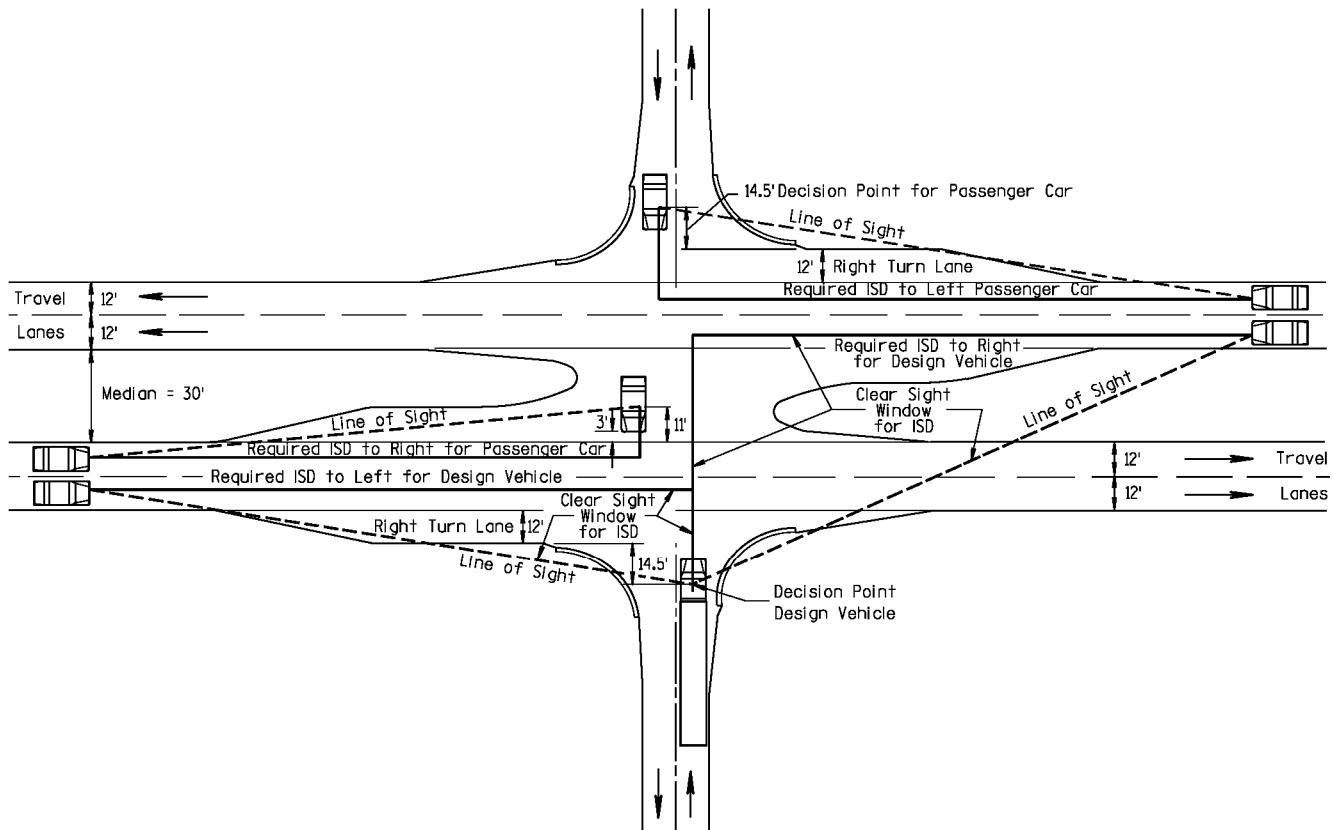
The Vision Triangle must be free of all obstructions.

Example computation of Intersection Sight Distance for Cases B1, B2, and B3**Given**

- Mainline: 4-lane divided bi-directional road (2 lanes in each direction); design speed = 50 mph; tangent alignment; lane width = 12 feet; median width = 30 feet; shoulder width = 10 ft
- Side road: arterial; grade < 3%; design speed = 40 mph
- Intersection: type B1 with 12 ft wide right turn lane

Find

- Design vehicle for intersection sight distance
- Required Intersection Sight Distances for both a passenger car and for the design vehicle

**Solution**

- From [Table 5.1](#) the design vehicle for an arterial is a WB truck.
- Intersection Sight Distance to the LEFT is the greater of that required for Case B2 - Right turn from the minor road, and Case B3 - Crossing maneuver from the minor road.
- Intersection Sight Distance to the RIGHT is the greater of that required for Case B1 - Left turn from the minor road, and Case B3 - Crossing maneuver from the minor road.

Intersection Sight Distances (ISDs) to LEFT			Intersection Sight Distances (ISDs) to RIGHT	
Case B2	Case B3	PASSENGER CAR	Case B1	Case B3
8.0	7.0	DESIRABLE time gap (sec) ^A	10.0	7.0
590	515	DESIRABLE ISD (feet) ^A	735	515
19	19	Vehicle length (feet) ^B	19	19
NA	NA	Vehicle length+ 6' < Median width?	Yes	Yes
Cross 12-ft right turn lane	Cross 12-ft right turn lane	ADJUSTMENT description	None	None
0.5	0.5	Additional time (sec) ^C	--	--
35	35	Additional ISD (feet)	--	--
625	550	Total ISD (feet)	735	515
625		Controlling ISD (feet)	735	
14.5 ft from the edge of right turn lane= 26.5 ft from the edge of travel lane.		Side road decision point location	11.0 feet from the median edge of the far side travel lanes	
Case B2	Case B3	WB TRUCK (DESIGN VEHICLE)	Case B1	Case B3
12.0	13.0	DESIRABLE time gap (sec) ^A	13.0	13.0
885	960	DESIRABLE ISD (feet) ^A	960	960
Greater than 55 ft	Greater than 55 ft	Vehicle length (feet) ^B	Greater than 55 ft	Greater than 55 ft
NA	NA	Vehicle length+ 6' < Median width?	No	No
Cross 12-ft right turn lane	Cross 12-ft right turn lane	ADJUSTMENT description	Cross an additional 54-feet = 4.5 lanes (12' right turn lane + 12' travel lane + 30' median)	Cross an additional 66-feet = 5.5 lanes (12' right turn lane + 2x12' travel lanes + 30' median)
0.7	0.7	Additional time (sec) ^C	0.7 x 4.5 = 3.15	0.7 x 5.5 = 3.85
50	50	Additional ISD (feet)	230	285
935	1010	Total ISD (feet)	1190	1245
	1010	Controlling ISD (feet)		1245
14.5 ft from the edge of right turn lane=26.5 ft from the edge of travel lane.		Side road decision point location	14.5 ft from the edge of right turn lane= 26.5 ft from the edge of travel lane.	

A See [Table 5.2](#)

B See Exh. 2-3, p21 & Exh.2-14, p32, GDHS 2004

C See [Table 5.2](#), Notes B & C